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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,375	10/28/2003	Vladislav Bezrukov	13913-100001 / 2003P00317	5324
32864	7590	08/16/2006	EXAMINER	
FISH & RICHARDSON, P.C. PO BOX 1022 MINNEAPOLIS, MN 55440-1022			NGUYEN, CHAU T	
			ART UNIT	PAPER NUMBER
			2176	

DATE MAILED: 08/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/695,375	BEZRUKOV ET AL.	
	Examiner	Art Unit	
	Chau Nguyen	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Amendment, received on 06/08/2006, has been entered. Claims 1-41 are presented for examination.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-41 are rejected under 35 U.S.C. 102(e) as being anticipated by Azami, US Patent Application Publication No. US 2004/0064481 A1.

4. As to independent claims 1, 24, 30 and 36, Azami discloses a method of maintaining extensible markup language (XML) documents comprising:

splitting an XML document into fragments according to rules (Abstract, and page 1, paragraph [0014] and page 4, paragraph [0062]: original structured data such as XML data is divided into a plurality of fragments);

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binding each of the fragments to an object in a content management system (page 5, paragraph [0067]: an ID (object) uniquely attached to each fragment; page 6, paragraphs [0083]-[0086]); and

providing a reference between the XML document and the fragments (pages 4-5, paragraphs [0062] and [0068]: reference information specifying the fragment data).

5. As to dependent claims 2, 25, 31, and 37, Azami discloses storing content associated with a fragment in the content management system (page 6, paragraph [0085]).

6. As to dependent claims 3, 26, 32, and 38, Azami discloses associating the content with a particular object in the content management system (page 5, paragraphs [0067]-[0068] and page 6, paragraphs [0083]-[0086]).

7. As to dependent claims 4, 27, 33, and 39, Azami discloses replacing the content associated with each fragment with a link to the object in the content management system (pages 7-8, paragraphs [0101] and page 10, paragraph [0136]).

8. As to dependent claims 5, 28, 34, and 40, Azami discloses associating multiple fragments with a particular object in the content management system (page 5, paragraphs [0071]-[0074]).

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9. As to dependent claim 6, Azami discloses detecting an outgoing reference to an object attribute (Fig. 13 and page 7, paragraph [0093]).

10. As to dependent claim 7, Azami discloses ensuring the reference is unique (page 5, paragraph [0068]).

11. As to dependent claim 8, Azami discloses setting the rules according to an application (page 5, paragraphs [0068]-[0074]).

12. As to dependent claim 9, Azami discloses wherein the rules include configuration rules (page 5, paragraphs [0067]-[0074]), the method further comprising:

analyzing content of the XML document using the configuration rules (pages 4-5, paragraph [0062]).

13. As to dependent claim 10, Azami discloses wherein the rules include sub-rules (page 5, paragraphs [0068]-[0074]).

14. As to dependent claim 11, Azami discloses wherein the rules include encoding rules (page 6, paragraph [0075]).

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15. As to dependent claim 12, Azami discloses wherein the configuration rules include a fragment rule that removes a fragment from the XML document and replaces the fragment with a reference (page 9, paragraph [0123]).

16. As to dependent claim 13, Azami discloses wherein the configuration rules include an unparsed object rule that extracts a string associated with an unparsed object and replaces the string with a reference (page 5, paragraph [0065] and pages 6-7, paragraph [0090]).

17. As to dependent claim 14, Azami discloses wherein the configuration rules include a hyperlink rule that replaces a link to another object attribute with a reference (pages 7-8, paragraphs [0101] and page 10, paragraph [0136]).

18. As to dependent claim 15, Azami discloses wherein the sub-rules include a pattern rule that extracts textual content from a fragment (page 5, paragraph [0065] and pages 6-7, paragraph [0090]).

19. As to dependent claim 16, Azami discloses wherein the sub-rules include an attribute rule that assigns each object with an attribute type (page 5, paragraph [0068]).

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20. As to dependent claim 17, Azami discloses wherein the attribute type includes logical object (LOIO) or physical object (PHIO) (page 5, paragraph [0068] and page 7, paragraph [0096]).

21. As to dependent claim 18, Azami discloses wherein the sub-rules include a class rule that provides a class name to an object (page 5, paragraph [0068]).

22. As to dependent claim 19, Azami discloses wherein encoding rules include internal entity encoding rules (page 5, paragraph [0068] and page 6, paragraph [0075]).

23. As to dependent claim 20, Azami discloses wherein encoding rules include external name encoding rules (page 5, paragraph [0068] and page 6, paragraph [0075]).

24. As to dependent claim 21, Azami discloses wherein encoding rules include unparsed object encoding rules (page 5, paragraph [0068] and page 6, paragraph [0075]).

25. As to dependent claim 22, Azami discloses wherein encoding rules include hyperlink encoding rules (pages 7-8, paragraph [0101] and pages 8-9, paragraph [0115]).

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26. As to dependent claims 23, 29, 35, and 41, Azami discloses wherein the fragment includes a sub-fragment (page 11, paragraph [0148]),

binding the sub-fragment to an object in a content management system (page 5, paragraph [0067]: an ID (object) uniquely attached to each fragment); and

providing a reference between the fragment and the sub-fragment (pages 4-5, paragraphs [0062] and [0068]: reference information specifying the fragment data).

Response to Arguments

In the remarks, Applicant(s) argued in substance that:

A) The prior art of record does not teach or disclose “splitting an XML document into fragments according to rules” as cited in claim 1 (see page 11 of Remarks).

In reply to argument A, Azami discloses on page 4, paragraph [0062] that original structured data (for example, MPEG-7 metadata or XML data whose format is defined using XML schema) is divided (split) into a plurality of fragments or a plurality of fragment data. Azami also discloses fragment configuration information includes position information (rule) specifying the position of the fragment data in the original structured data and reference information (rule) specifying the fragment data (page 4, paragraph [0062]).

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B) The prior art of record does not disclose “binding each of the fragments to an object in a content management system. (see page 11 of Remarks)

In reply to argument B, Applicant(s) described in the Specification on page 3, lines 23-26 “The content management system splits an XML document into fragments according to rules.” In the same field of endeavor, Azami discloses on page 6, paragraphs [0083]-[0086] and Fig. 11 that metadata stream separator separates the metadata stream into fragment data and fragment configuration information, thus the metadata stream separator is considered as “content management system”. In addition, Azami discloses on page 5, paragraph [0067]: an ID (object) uniquely attached to each fragment.

C) The prior art of record fails to disclose associating content with an object in a content management system (see page 12 of Remarks).

In reply to argument C, again, this argument is similar to argument B. Applicant(s) described in the Specification on page 3, lines 23-26 “The content management system splits an XML document into fragments according to rules.” In the same field of endeavor, Azami discloses on page 6, paragraphs [0083]-[0086] and Fig. 11 that metadata stream separator separates the metadata stream into fragment data and fragment configuration information, thus the metadata stream separator is considered as “content management system”. In addition, Azami discloses on page 5, paragraphs [0067]-[0068]: an ID (object) uniquely attached to each fragment.

D) The prior art of record does not disclose that rules according to which an XML document is split into fragment include configuration rules (see page 14 of Remarks).

In reply to argument D, Azami discloses on page 5, paragraphs [0067]-[0074] that metadata is divided into a plurality of fragment data and fragment configuration information (configuration rules) corresponding to each fragment data is created.

E) The prior art of record does not disclose a pattern rule that extracts textual content from a fragment (see page 15 of Remarks).

In reply to argument E, Azami discloses on page 5, paragraph [0065] that the receiver receives the metadata via broadcasting, extracts fragment data from the metadata stream. Azami also discloses on pages 6-7, paragraph [0090] that the position information and the reference information are extracted from the fragment configuration information as well. Even though Azami does not explicitly disclose a pattern rule, but Azami discloses the functionality of a pattern rule which extracts fragment data from the metadata stream and also extracts position information and the reference information from the fragment configuration information. Thus, the pattern rule is inherent from the extracting step.

F) The prior art of record does not disclose attribute rule that assign each object with an attribute type (see page 15 of Remarks).

In reply to argument F, Azami discloses on page 6, paragraph [0068] that the fragment configuration information includes reference information that contains element type (attribute type).

G) The prior art of record does not disclose “the attribute type includes logical object and physical object” (see page 15 of Remarks).

In reply to argument G, Azami discloses on page 7, paragraph [0068] that the element type (attribute type) describes the element type name in the XML schema of the highest node of the fragment data.

H) The prior art of record does not disclose a class rule that provides a class name to an object (see page 16 of Remarks).

In reply to argument H, Azami discloses on page 6, paragraph [0068] that the fragment configuration information includes reference information that contains element name which describes the XML element name of the highest node of the fragment data.

I) The prior art of record does not disclose internal entity encoding rules (see page 17 of Remarks).

In reply to argument I, Azami discloses on page 6, paragraph [0075] that the configuration information in this embodiment may be converted to binary encoding data using appropriate means to represent the information as binary data. Thus, the internal

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entity encoding rule is inherent from the encoding the configuration information into binary encoding data.

J) The prior art of record does not disclose encoding rules include hyperlink encoding rules (see page 19 of Remarks).

In reply to argument J, Azami discloses on pages 7-8, paragraph [0101] that instead of the ID reference used in the structure of the fragment configuration information in Fig. 5, the URI reference (hyperlink) is included in the reference information to specify the fragment data using the URI.

27. Applicant's arguments and amendments filed on 06/08/2006 have been fully considered but they are not persuasive. Please see the rejection and response to arguments above.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

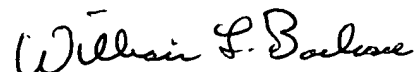
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau Nguyen whose telephone number is (571) 272-4092. The examiner can normally be reached on 8:30 am – 5:30 pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon, can be reached on (571) 272-4136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. On July 15, 2005, the Central Facsimile (FAX) Number will change from 703-872-9306 to 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chau Nguyen
Patent Examiner
Art Unit 2176


WILLIAM BASHORE
PRIMARY EXAMINER